

Work Order ID 82989

Thursday, April 12, 2012 10:18:40 AM

82989

Page 1

Item ID: D4148-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Crosstube Lug Assembly, Fwd
 Start Date: 4/12/2012 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 4/20/2012 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: *[Signature]* Date: 12-04-12 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D4148	D

100		0.00							
100									
Small Fab	Memo	0.00							
Small Fab	1- Assemble as per dwg								

110	QC5- Inspect part completeness to step on W/O	0.00							
110									
QC	Memo	0.00							
Quality Control									

120	Identify as per dwg & Stock Location. <u>468</u>	0.00							
120									
Packaging	Memo	0.00							
Packaging									

Handwritten notes:
 4x ϕ *[Signature]* 12/05/12
 (x4)
 (42) 12/5/13 *[Signature]*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Thursday, April 12, 2012 10:18:40 AM

Item ID: D4148-041

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Crosstube Lug Assembly, Fwd

Start Date: 4/12/2012 **Start Qty:** 4.00

4

Cust Item ID:

Required Date: 4/20/2012 Req'd Qty: 4.00

4

Customer:

Reference:

Run Start *NR1*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop *NR2*

OC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation Description

Set Up/ Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
---------	--------	-----------	------------	------------	---------------	-------------

130

QC21- Final Inspection - Work Order Release

0.00

130

QC

Memo

0.00

Quality Control

12/5/03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Picklist Print

Thursday, April 12, 2012 10:18:44 AM

Page 1

Work Order ID: 82989

82989

Parent Item: D4148-041

D4148-041

Parent Item Name: Crosstube Lug Assembly, Fwd

Start Date: 4/12/2012

Required Date: 4/20/2012

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A 10.06.24 new issue DD verf:EC
IPP Rev:B 10.07.22 as per revB DD verf:JLM IPP Rev:C
10.10.29 as per revC DD verf:EC IPP REV:D 11.03.02
AS PER DWG REV.D DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS21043-3		Purchased	No			100	Each	1,400.000	4				
MS21043-3									**				
Nut													

Location	Loc Qty	Loc Code
FG	72	
103691	72	
GA	184	
120693	184	
ST301	1144	
118077	2	
118614	96	
118686	30	
119758	20	
121255	996	

MS21043-4 Purchased No

100 Each 1,679.000 1 12

MS21043-4

Nut

Location	Loc Qty	Loc Code
FG	40	
104603	40	
ST301	1639	
119546	286	
120308	353	
121162	1000	

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Page 2

Work Order ID: 82989

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Parent Item: D4148-041

D4148-041

Parent Item Name: Crosstube Lug Assembly, Fwd

Start Date: 4/12/2012

Required Date: 4/20/2012

Start Qty: 4.00

Required Qty: 4.00

D2690-6 Manufactured No

100 Each

24.0000

1 4

D2690-6

Lanyard Assembly

**

Location

Loc Qty

Loc Code

ST016

24

82061

24

D3910-1 Manufactured No

100 Each

16.0000

1 4

D3910-1

Crosstube Lug

**

Location

Loc Qty

Loc Code

st507

16

81474

16

D4091-1 Manufactured No

100 Each

55.0000

1 4

D4091-1

Mounting Lug

**

Location

Loc Qty

Loc Code

ST458

55

81168

30

81461

25

D4148-1 Manufactured No

100 Each

21.0000

2 8

D4148-1

Crosstube Lug Plate, Fwd

**

Location

Loc Qty

Loc Code

ST132

21

78331

1

82046

20

W/O:		WORK ORDER CHANGES					
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Thursday, April 12, 2012 10:18:45 AM

Page 3

Work Order ID: 82989

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Parent Item: D4148-041

D4148-041

Parent Item Name: Crosstube Lug Assembly, Fwd

Start Date: 4/12/2012

Required Date: 4/20/2012

Start Qty: 4.00

Required Qty: 4.00

D4148-3 Manufactured No

100 Each

3.0000

1

4

D4148-3

Stud Receiver, Lower

**

Location

Loc Qty

Loc Code

ST133

3

79055

3

D4148-5 Manufactured No

100 Each

8.0000

1

4

D4148-5

Eyebolt Stud

**

Location

Loc Qty

Loc Code

ST133

8

81405

8

AN3C12A Purchased No

100 Each

227.0000

2

8

AN3C12A

Bolts

**

Location

Loc Qty

Loc Code

GA

40

120449

40

ST351

187

117514

4

118112

5

118451

22

119510

1

120423

155

Handwritten notes and signatures:
 382311 (4x)
 382965 (1x)
 8

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng/ Prod Mgr	Approval QC Inspector

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Parent Item Name: Crosstube Lug Assembly, Fwd

Start Date: 4/12/2012

Required Date: 4/20/2012

Start Qty: 4.00

Required Qty: 4.00

AN4C13A Purchased No
AN4C13A
 BOLT

100 Each 87.0000 3 12

**

EP 12/05/01
12

Location	Loc Qty	Loc Code
ST307	82	
121166	82	
ST357	5	
120187	1	
120423	4	

MS17984-C413 Purchased No
MS17984-C413
 PIN, QUICK RELEASE

100 Each 51.0000 1 4

**

EP 12/05/01

Location	Loc Qty	Loc Code
ST315	3	
114340	1	
118612	2	
ST333	20	
121350	20	
ST335	28	
121091	28	

MS20615-4M18 Purchased No
MS20615-4M18
 Rivet

100 Each 216.0000 8 32

**

EP 12/05/01
32

Location	Loc Qty	Loc Code
322	100	
121349	100	
ST323	116	
118543	116	

W/O:		WORK ORDER CHANGES					
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Page 5

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Parent Item: D4148-041

D4148-041

Parent Item Name: Crosstube Lug Assembly, Fwd

Start Date: 4/12/2012

Required Date: 4/20/2012

Start Qty: 4.00

Required Qty: 4.00

NAS1149C0332R

Purchased

No

100

Each

2,781.000

4

16

NAS1149C0332R

Washer

**

Signature
4/12/05/01

Location

Loc Qty

Loc Code

ST297

257

119736

196

120648

61

ST298

2524

121255

2524

NAS1149C0432R

Purchased

No

100

Each

5,000.000

6

24

NAS1149C0432R

Washer

**

M121509
162
Signature
4/12/05/01

Location

Loc Qty

Loc Code

ST297

2000

117291

1000

119124

1000

ST298

3000

121255

3000

24

Thursday, April 12, 2012 10:18:45 AM

Shop Packet Print

Page 5

W/O:		WORK ORDER CHANGES					
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8

7

6

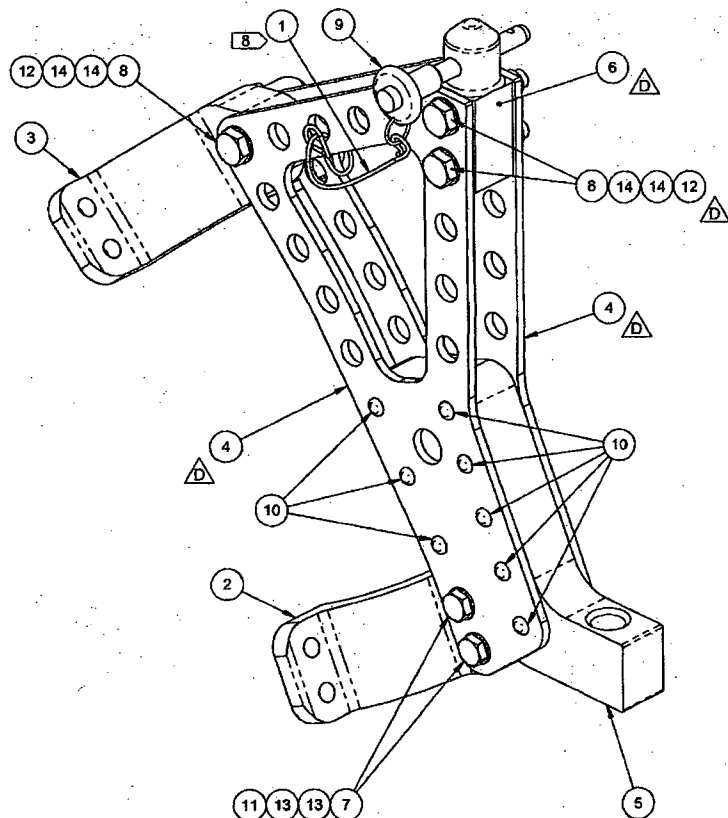
5

4

3

2

1



D4148-041 FWD X-TUBE LUG ASSY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4148-041" PER DART QSI 044 6.1
- 7) WEIGHT: 3.67 lbs
- 8) ATTACH D2690-6 TO D4148-1 BY LOOPING AROUND A LIGHTENING HOLE FIRST AND THEN SECURE TO MS17984-C413

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4148-041	FWD X-TUBE LUG ASSY
1	1	D2690-6	LANYARD
2	1	D3910-1	X-TUBE LUG
3	1	D4091-1	MOUNTING LUG
4	2	D4148-1	FWD X-TUBE LUG PLATE
5	1	D4148-3	STUD RECEIVER LOWER
6	1	D4148-5	EYEBOLT STUD
7	2	AN3C12A	BOLT
8	3	AN4C13A	BOLT
9	1	MS17984-C413	PIP PIN
10	8	MS20615-4M18	RIVET
11	2	MS21043C3	NUT
12	3	MS21043C4	NUT
13	4	NAS1149C0332R	WASHER
14	6	NAS1149C0432R	WASHER

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 82989

RELEASED
2011-02-24

D	HOLE DIA CHANGED TO 0.252" (D8-3); HOLE DIA CHANGED TO 0.250" (C8-6); REPLACED QTY(2) AN3C12A, MS21043C3 AND QTY(4) NAS1149C0332R WITH QTY(2) AN4C13A, MS21043C4 AND QTY(4) NAS1149C0432R (D3-1, C4-2)	SC	11.02.22
C	REDESIGNED D4148-1/3 TO ADDRESS COMPATIBILITY ISSUES WITH D350-591 SHORT STEPS	MB	10.10.12
B	REPLACED QTY(3) MS20615-4M18 WITH QTY(2) EACH AN3C12A, MS21043-3 AND QTY(4) NAS1149C0332R WASHER (ZN D3-1, B7-2 & B4-2); MS20615-4M18 WAS MS20615-4M20 (ZN D3-1 & B7-2); Ø0.191 2 PL REPLACES Ø0.129 3 PL (ZN D6-3); Ø0.129 7 PL WAS 10 PL (ZN A7-3); Ø0.191 WAS 0.128 (ZN C8-5). REASON: SEE TR-D350-607-2 REV. B.	MB	10.07.05
A	NEW ISSUE	MB	10.08.18
REV.	DESCRIPTION	BY	DATE
DESIGN	MB	DART AEROSPACE LTD	
DRAWN	SC	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		D4148	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		FWD X-TUBE LUG ASSY	NTS
DATE	11.02.22	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

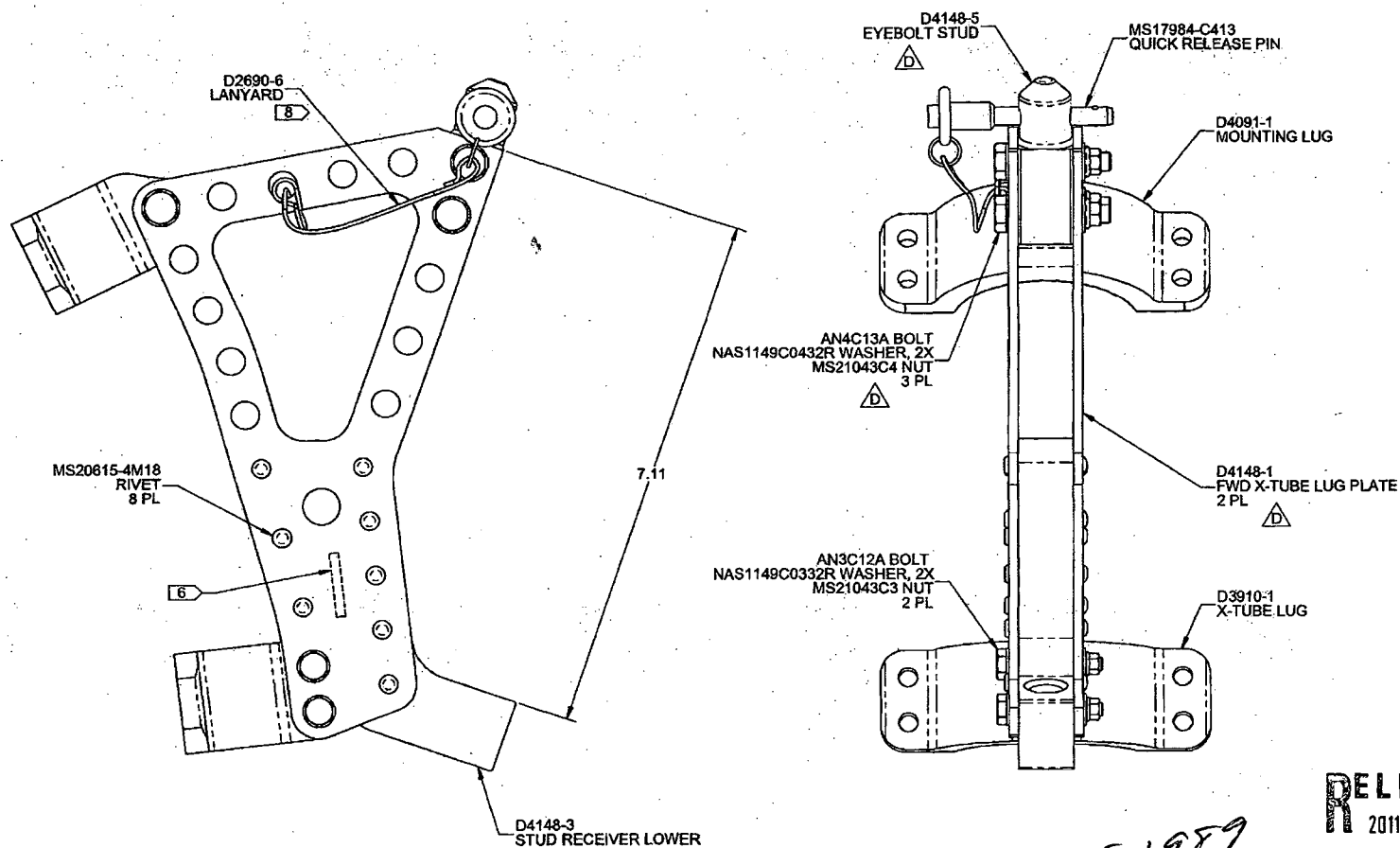
W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries



D4148-041 FWD X-TUBE LUG ASSY

RELEASED
2011-02-24
JMP

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	SC	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		D4148	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		FWD X-TUBE LUG ASSY	NTS
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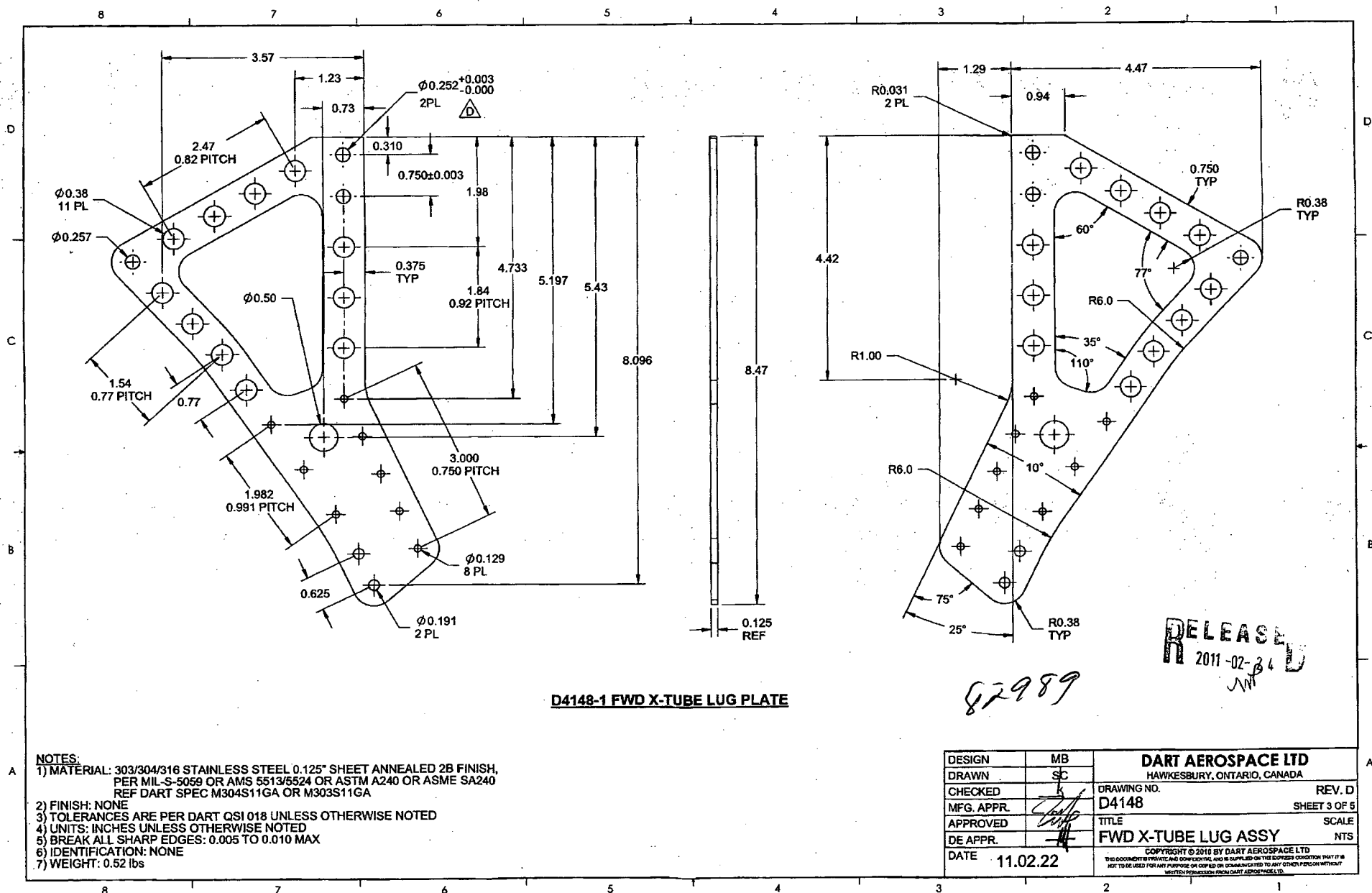
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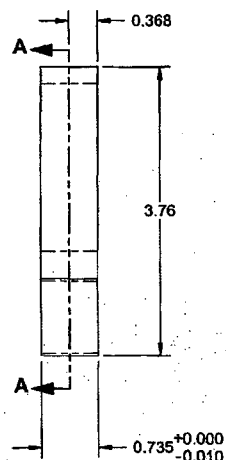
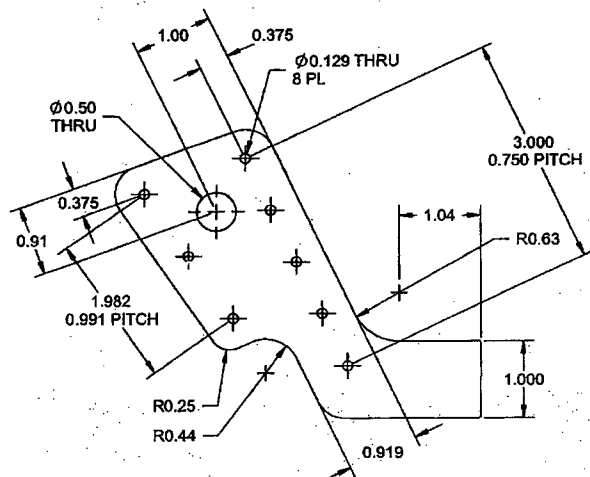
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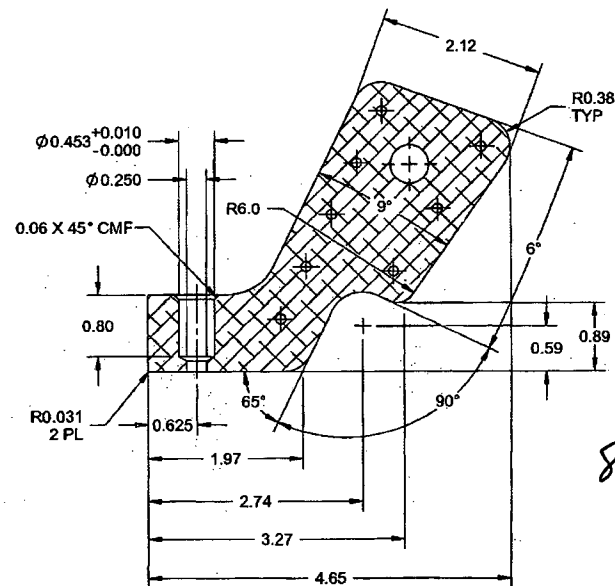
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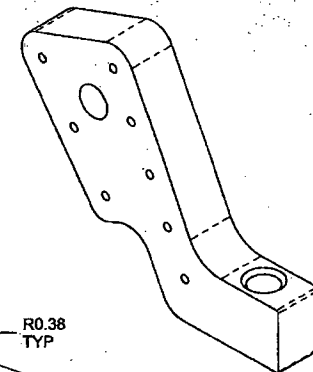
NOTE: Date & initial all entries



D4148-3 STUD RECEIVER LOWER



SECTION A-A



82989

RELEASED
2011-02-24

NOTES:

- 1) MATERIAL: 303/304/316 STAINLESS STEEL BAR PER ASTM A582 OR ASTM A276
REF DART SPEC M304B OR M303B
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.52 lbs

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	SC	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		D4148	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		FWD X-TUBE LUG ASSY	NTS
DATE	11.02.22	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
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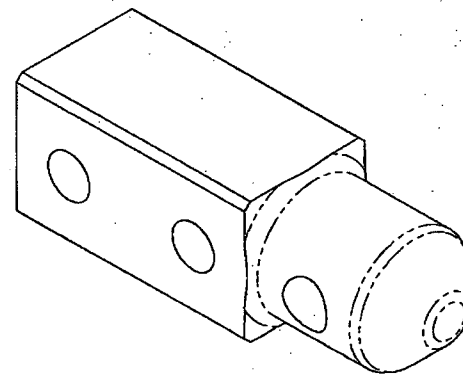
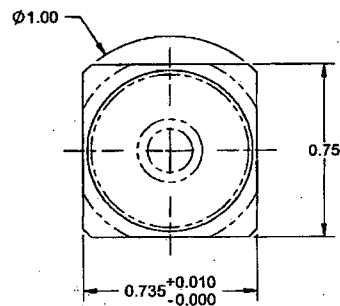
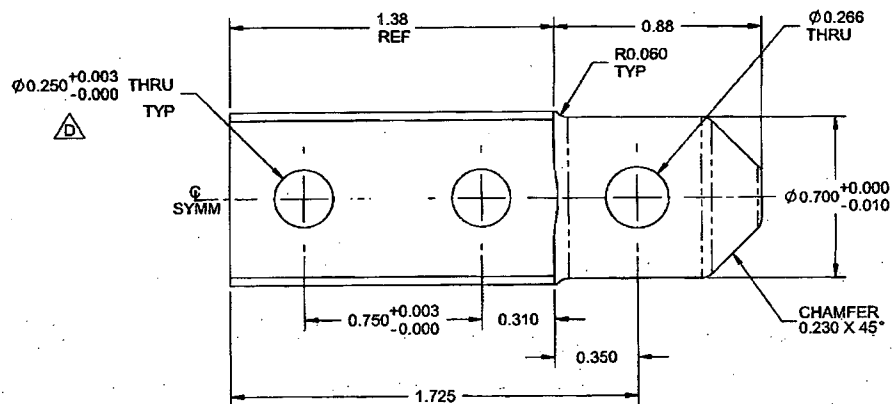
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NOTE: Date & initial all entries



D4148-5 EYEBOLT STUD

52989

RELEASED
2011-02-22

NOTES:

- 1) MATERIAL: 303/304/316 STAINLESS STEEL BAR PER ASTM A582 OR ASTM A278
REF DART SPEC M304B OR M303B
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.27 lbs

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	SC	HAWKESSBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		D4148	SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		FWD X-TUBE LUG ASSY	NTS
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